I hereby certify that this correspondence is being deposited with the United States Postal Service on the date set forth below as First Class Mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P O Box 1430, Alexandria, VA 22313-1450.

E Date of Signature and Deposit: January 31, 2006

Sara D. Vinarov

**PATENT** 

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Michael M. Cox

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Serial No.: 10/733,782

70.1.a. 1.10... 10,733,702

Filed: 12/11/2003

Title: RecA MUTANTS

Date: January 31, 2006

Group Art Unit: 1632

Examiner:

File No.: 960296.99501

## RESPONSE TO RESTRICTION REQUIREMENT

Mail Stop Amendment Commissioner for Patents P O Box 1450 Alexandria, VA 22313-1450

Dear Sir:

In an Office Action mailed January 10, 2006, the Examiner in charge of the abovenoted application imposed a requirement for restriction dividing the claims into three groups, which in the Examiner's opinion are not related. The groups are as follows:

Group I, Claims 1, 2, 4-13, 15-28, and 33-36, drawn to mutant RecA proteins and kits thereof, classified in Class 435, subclass 183;

Group II, Claims 3 and 14, drawn to polynucleotide sequences as set forth in SEQ ID NOs:2 and 4, classified in Class 514, subclass 44; and

Group III, Claims 29-32, drawn to methods of catalyzing (or increasing the efficiency of) homologous DNA pairing and DNA strand exchange reactions using the proteins of Group I or III, classified in Class 435, subclass 91.41.

In response, applicants provisionally elect Group I drawn to Claims 1, 2, 4-13, 15-28, and 33-36. This election is made with traverse and without prejudice to the eventual filing of a divisional application and rejoinder of any of the non-elected groups back into the application.

The restriction is traversed on the grounds that the subject matter of Groups I-III, relating to RecA mutants with improved binding properties, is inextricably linked.

Applicants submit that the compositions and methods of the invention all employ a modification to the RecA gene (the mutant polynucleotide and the resultant protein it encodes), resulting in an enzymatic product used to catalyze *in vitro* homologous DNA pairing and DNA strand exchange reactions.

Applicants believe that a proper search for one group of claims directed to a modified form of RecA would inevitably overlap with that for the others, which involve the polynucleotide that encodes the modified RecA and its function. Thus, the results for one should bring to light the art relevant to the claims of the other groups. Applicants do not believe that a burden exists for searching more than one of the patentably related groups.

Applicants also wish to note that procedurally restriction requirements are optional in all cases (see MPEP § 803). If the search and examination of a claim set can be made without serious burden, the Examiner must examine the claims on the merits, even though they may be arguably directed at distinct or independent inventions (MPEP § 803). In the present application, and as described hereinabove, it is respectfully submitted that claims in Groups I-III can be examined together without serious burden on the Office.

Applicants also submit that the fees due in connection with filing a divisional patent application and for prosecution and maintaining a plurality of patents would place an undue burden on the applicants. It is submitted that for the convenience of the Patent Office and the applicants, the applicants are best served by considering all of the claims in a single patent application and not several separate patent applications.

For these reasons, applicants respectfully request that the restriction requirement on Groups I-III be reconsidered and withdrawn. Wherefore examination on the merits is respectfully requested.

No extension of time is believed to be necessary and no fee is believed to be due in connection with this response. However, if any fee is due in this or any subsequent response, please consider this to be a request to charge the fee required to effectuate this response to Deposit Account No. 17-0055.

Respectfully submitted,

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